

BPA Heat Pump Specification

Applicable to: Commercial Heat Pump Upgrades and Heat Pump Conversions

Note: Selected equipment must meet both cooling and heating Tier requirements (if listed)

Specification last updated 4/2017



Version 10/1/2017

Heat Pumps - Air Source

| Equipment Size (Btu/h) | Mode | Heating Type | Subcategory | Tier 1 (High Efficiency) | Tier 2 (Highest Efficiency) |
|------------------------|--------------|-------------------------------|---------------------------------|--------------------------|-----------------------------|
| <65,000 | Cooling Mode | All | Split System | 15 SEER | 16 SEER |
| | | All | Single Package | 15 SEER | 16 SEER |
| | Heating Mode | - | Split System | 8.5 HSPF | 9 HSPF |
| | | - | Single Package | 8 HSPF | 8.2 HSPF |
| ≥65,000 and <135,000 | Cooling Mode | Electric Resistance (or None) | Split System and Single Package | 12.2 IEER | 13.6 IEER |
| | | All Other | Split System and Single Package | 12 IEER | 13.4 IEER |
| | Heating Mode | - | 47°F db/43°F wb Outdoor Air | 3.4 COP | N/A |
| | | - | 17°F db/15°F wb Outdoor Air | 2.4 COP | N/A |
| ≥135,000 and <240,000 | Cooling Mode | Electric Resistance (or None) | Split System and Single Package | 11.6 IEER | N/A |
| | | All Other | Split System and Single Package | 11.4 IEER | N/A |
| | Heating Mode | - | 47°F db/43°F wb Outdoor Air | 3.2 COP | N/A |
| | | - | 17°F db/15°F wb Outdoor Air | 2.1 COP | N/A |
| ≥240,000 and <760,000 | Cooling Mode | Electric Resistance (or None) | Split System and Single Package | 10.6 IEER | N/A |
| | | All Other | Split System and Single Package | 10.4 IEER | N/A |
| | Heating Mode | - | N/A | N/A | N/A |

Heat Pumps - Water Source

| Equipment Size (Btu/h) | Mode | Heating Type | Subcategory | Tier 1 (High Efficiency) | Tier 2 (Highest Efficiency) |
|------------------------|--------------|--------------|--------------------|--------------------------|-----------------------------|
| <135,000 | Cooling Mode | All | 86° Entering Water | 14 EER | N/A |
| | Heating Mode | - | 68° Entering Water | 4.6 COP | N/A |

SEER—Seasonal Energy Efficiency Ratio

EER—Energy Efficiency Ratio

HSPF— Heating Seasonal Performance Factor

IEER—Integrated Energy Efficiency Ratio

COP—Coefficient of Performance

db—Dry Bulb

wb—Wet Bulb

The BPA specification is based on the Consortium for Energy Efficiency (CEE) Commercial Unitary Air-conditioning and Heat Pumps Specification, last updated January 12, 2016. BPA is a member of the CEE High Efficiency Commercial Unitary Air-conditioning and Heat Pump Initiative. As part of this Initiative, BPA has adopted CEE's Tier 1 and Tier 2 convention, in addition to a part-load metric in order to focus on energy efficiency savings rather than peak energy savings. More information about CEE can be found at <http://www.cee1.org/>